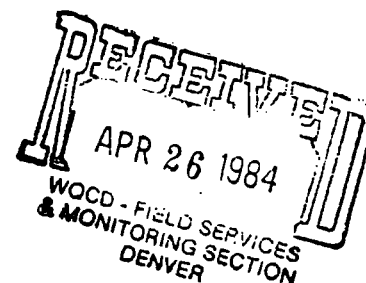


ANACONDA Minerals Company  
555 Seventeenth Street  
Denver, Colorado 80202  
Telephone 303 293 4000



April 13, 1984

Sandy Squire  
Engineering Technician  
Permits and Enforcement Section  
Water Quality Control Division  
Colorado Department of Health  
4210 East 11th Avenue  
Denver, Colorado 80220



Subject: Rico Water Treatment System  
CDPS Permit No. CO 0029793  
NOV September 1980

Dear Ms. Squire:

The Notice of Violation and associated Cease and Desist Order issued by the State of Colorado in September of 1980 required that certain tasks be completed by Anaconda Minerals Company. One of these tasks, and the only remaining task, was to bring the mine discharge into compliance with discharge permit limitations. Anaconda's response was that treatability studies would be performed. The results of this study provided the basis for the installation of a treatment system for the discharge.

The Water Treatment System was put into operation on a continuous basis on February 23, 1984 and as of April 1, 1984, we consider the plant to be fully operational.

The system is designed using a ball mill for slaking lime and provides for addition of the lime slurry at a controlled rate, presently developing a pH of 8.5 - 8.7 in the mine discharge stream. The polymer addition system is in place and operational although it has not been needed to date. Jar tests run on the neutralized stream show no effect of the polymer on settling time or sludge density. We suspect that this is due to the lime particles or lime cull particles which are ground in the ball mill coincidentally with the pebble lime. These particles frequently aid in coalescing other, smaller particles, acting as a settling aid.

Pond discharge reached a pH of 8.3 on April 12, 1984; 7.3 being the previous historic high. Monitoring within the pond system for pH, indicates that equilibrium through the system is gradually being attained. The next self monitoring sample is to be taken on Monday April 16, 1984. This will be the first sample taken with the discharge at a pH over 7.3 and will be the first opportunity to determine the quality of the actual discharge stream at an elevated pH.

S. Squire  
Rico Water Treatment System  
CDPS Permit No. CO 0029793  
NOV September 1980  
April 13, 1984  
Page two

As previously mentioned, the installation of the treatment facility completes the tasks listed in the Cease and Desist order issued in September of 1980. As we have previously discussed, we are not yet certain that the treatment system will meet all the permit limitations, which will take effect in October, 1984, on a continuous basis. The treatability studies indicated that zinc, copper, and lead should not be a problem. ~~The cadmium limitation, however, at 0.0004 mg/l, the concentration used at maximum flow to generate the #/day limitation, is at the detection limit.~~ Compliance cannot be assured at this unrealistic level.

We would like to take this opportunity to thank the State for giving Anaconda the time to solve the discharge quality problem and install appropriate treatment capability.

Very truly yours,



John R. Whyte  
Environmental Services Manager

JRW:nc

xc: U. S. Env. Protection Agency  
1860 Lincoln Street, Suite 103  
Denver, Colorado 80295  
Attn: Enforcement-Permit Prog.